

## IN THE CLAIMS

1-41 (canceled)

42. (Original) A method for selecting advantageous growth conditions for embryo development comprising:

a) determining RNA expression profiles for staged embryos under control culture conditions;

b) altering culture conditions;

c) determining RNA expression profiles for staged embryos under altered culture conditions; and

d) correlating culture change to developmental effect in embryo.

43. (Original) The method of claim 42, wherein conditions are selected which produce RNA expression profiles most closely approximating late-stage embryo profiles.

44. (Original) The method of claim 42, wherein the culture conditions are altered by operatively linking one or more stage-specific embryo promoter(s) to one or more sense or antisense nucleic acid molecules.

45. (Currently amended) The method of claim 42, wherein the culture conditions are altered by operatively linking ~~one more~~ the stage-specific embryo promoter[~~[(s)]~~] ~~selected from~~ SEQ ID NO[~~[S]]~~: 328[~~[-334]]~~ to one or more sense or antisense nucleic acid molecules.

46. (Original) The method of claim 42, wherein the change in expression profiles is correlated by a relational database.

47-61 (canceled)